



Systematized Logics and the 9 square grid:

Architectural Evolution of the Nine Square

The nine square as an originating historical typology emerges from a classical reading that generated a centralized plan (a clearly articulated and typically hierarchical central space) encircled with a peripheral zone of the surrounding 8 squares. This evolved from a static, symmetrical, and concentric logic (Palladio [2]) to a field system with subordinated localized orders within a collagist composition (Le Corbusier [3]), ultimately arriving at a reduced kit of parts removing programmatic function and materiality to privilege the abstraction of the compositional system (Hejduk [4+5]).

Next 9

Building upon these three evolutionary stages of the nine square through geometry, system and narrative; the next evolution allows for compositional primitivism, instigated by rational figuration, and articulated by programmatic function, to establish an elemental reconsideration. Engaging the geometric rubrics with pragmatic realities, the variation and iteration metamorphose across the differential articulations of the system.

Systematized Logics

The relevance of form is established through its generational rationale. The governance of its physical properties is derivative of the rules and operations that establish its specificity. To critically engage a precision of form, the opportunities of serial iteration within a type allows for iteration to examine difference.

THE SERIAL PROJECT

Type and variant through the iteration allows for the permeation of an idea. The benefit of families is they allow for collective concentration of an investigation while providing diverse opportunities through partial differentiation. Shared sensibilities taken in diverse trajectories establish operational logics that transcend the authorial process of the single design. The series privileges instead a systemic approach that responds to the larger disciplinary field to engage the design inquiry through the permutation. The methods imply an open source sensibility to seriality intrinsically encouraging the riff.

In Sol LeWitt's (1928–2007) 1966 work Serial Project [1], I (ABCD), the emphasis of the idea manifest through iterative logics became manifest in the physical product. The idea as the dominant production establishes the process implemented with rules. Form becomes a derivative of implementing these articulated rules. The seriality of the final product emphasizes equality to each of the stages and/or states of being and complexity. Specifically, the work generates a series of combinations of both open and closed enameled aluminum cubes articulated through line and plane; frame and solid; within a dominant grid. The method provides the view with the embodied logic of the system. Writing: "The aim of the artist would not be to instruct the viewer but to give him information," in a text accompanying this work, LeWitt emphasizes the rule over the form.

Extending these techniques to architecture, the use of fundamental and repeated organizational geometry that provide scaffolding for variation, allow the resulting primal geometries to provide diverse resonance of programmatic, formal and experiential forms. In this investigation, the nine square grid is adopted for its architectural legacy, but unlike its previous modernist investigations, palimpsest systems are not employed to interrupt, articulate or obfuscate the underlying geometry, but rather the simplicity of the multiple within the system itself is investigated for its shear ability to differentiate and articulate.

The systemic logic of the rule based series allows for difference of form to emerge from shifting decision making in the process of defining the system. Regulated by the module, the rule sets engaged within the simplicity of the field provide an opportunity for logic variation. The generation of architectural form is manifest through iterations of a type each specifically justified by the localized decision making process within the larger rubric. nine square

The opportunity of the nine square grid is established by the simultaneous projected continuity of the frame within the contextual multivalent field of the grid. In this iterative series, the operation within this field becomes a modular mechanism derived out of planimetric rigor (employing the plan as the primary drawing type and design tool). Though experienced

through the movement through the field and formally perceived through projective perspectival and sequential movement; the design rigors occur within the representational tactics of plan (as a horizontal and programmatic organizational cut), section (as a vertical and performative cut) and axonometric (as a formal three-dimensional form based system). Through these representational systems, there is a conscious articulation of the building that subscribes to pragmatism of construction and use, but similarly relies upon a rooted removal of "content" of architectural reference, exerting a dependence upon the system itself as a primal mechanism with precise establishing and governing logics. The generation of form in concert with function emerges out of this abstracted field providing a uniquely compositional and experiential result.

The implied continuity of the field (within a single composition and compounded through the serial multiplicity of the series) privileges the articulation of the geometry through the addition of discrete boundary elements to establish a specific formality. Intrinsically, the surfaces formulate large volumetric figures that sit in dialogue as objectified forms relative to one another and the continuity of the regimented space. The formalized objects within the field take on significance within their own specific formal thinking but defer their dominance to the inter-relationships of the parts in dialogue as the governing definers of the composition as a whole. The object and context resonate and layer. The place and position of the additive field objects allows an ever increasing complexity to the inter-relationships.

The field provides an intrinsic privileging of the between, dominating the spatial condition over the formal object. The field allows for the sequential navigation through space over time providing an unfolding of the composition and an intrinsically spatial proposition. Muted operations through the systemic logics necessitate an experiential preference. The reading of the space and form is thus cognitive and emotive not referential.

The addition of program further merges cycles of use and occupation to this palimpsest condition. Part to part to part to field become intricately relative and the logic of the whole remains embodied in the collection. As a result, casual decisions are not possible forcing regimental rigor and overall consideration of any localized condition. This inter-cohesion innately privileges a minimalism (or essentialism) of figural form to assume greater and greater impact through fewer and fewer parts. The fragment can be engaged because the comprehensive collective field aggregates and hold together. The geometric rigidity and systemic logic provides the connective tissue that creates the tethered combination. The field and its complexity allow the moment.

9x9 = 81 - The field is expanded. The nine square examined in a nine by nine field of iterations to produce 81 versions. The iterative nature of the implied rules, modules and defining geometries of the generative system establish a shared sensibility. The multiples demonstrate the flexibility within the geometry. Each individual composition exists within the series. The series justifies the individual composition. Each specific composition, (as a discrete iteration), connects to the next through a self-similar sensibility while maintaining a defined differentiation. The whole is a part of the system.

The foundational typologies of line, plane and mass are each mapped across the same 81 diagrams. Even the simplicity of these primal graphic techniques demonstrates opportunity for differential iteration. Articulation of form (even within a single type) is dependent upon the representation to establish its hierarchy. Each iterative diagram leads to differential results.

Nine of the 81 are culled and developed in more detail. Transitioned into specific architectural propositions, their interior logics remain a portion of the collective field. The nine are chosen to reference iconic single family residential house typologies adopting their legacy and reference through their hybridization. Innovation comes from the iteration. The simplicity of the premise breeds complexity through the diversity of possible outcomes.

The module is established by a structural and material dimension. The 18 foot by 18 foot bay creates a standard module. The material logic of construction allows for the use of conventional systems. Aggregated in a field of three modules by three modules the base overall dimension becomes 54 feet by 54 feet.

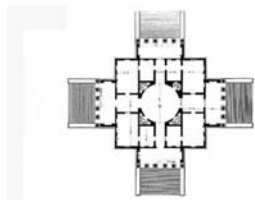
The domestic program contains areas for: live, dine, sleep, bathe and work. The connection between inside and outside, open and closed, is established through a variation of layered zones. The figuration provides social scenarios that impress attitudes of occupation.

The orientation to the site sits in alignment to the cardinal ordinances. The traditions of drawing establish north as up. The grid echoes the relativity of place. The ground is an abstract and raw plane.

The nine iterations are:



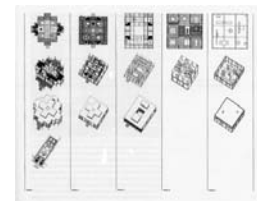
[1] Sol LeWitt



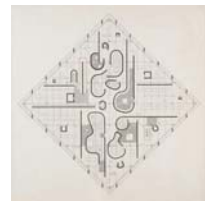
[2] Palladio



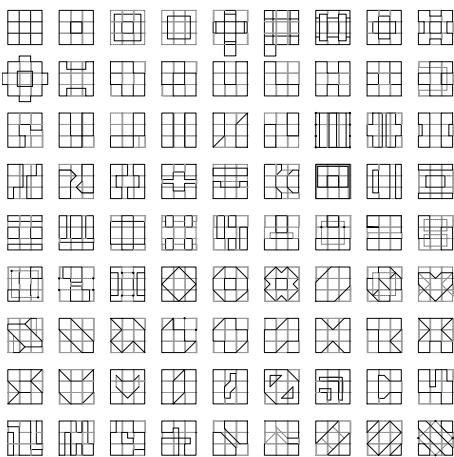
[3] Le Corbusier



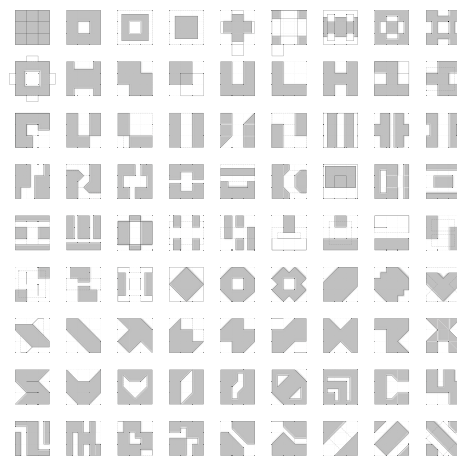
[4] Hedjuk



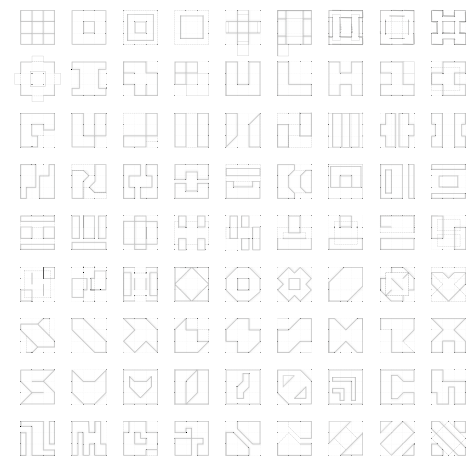
[5] Hedjuk



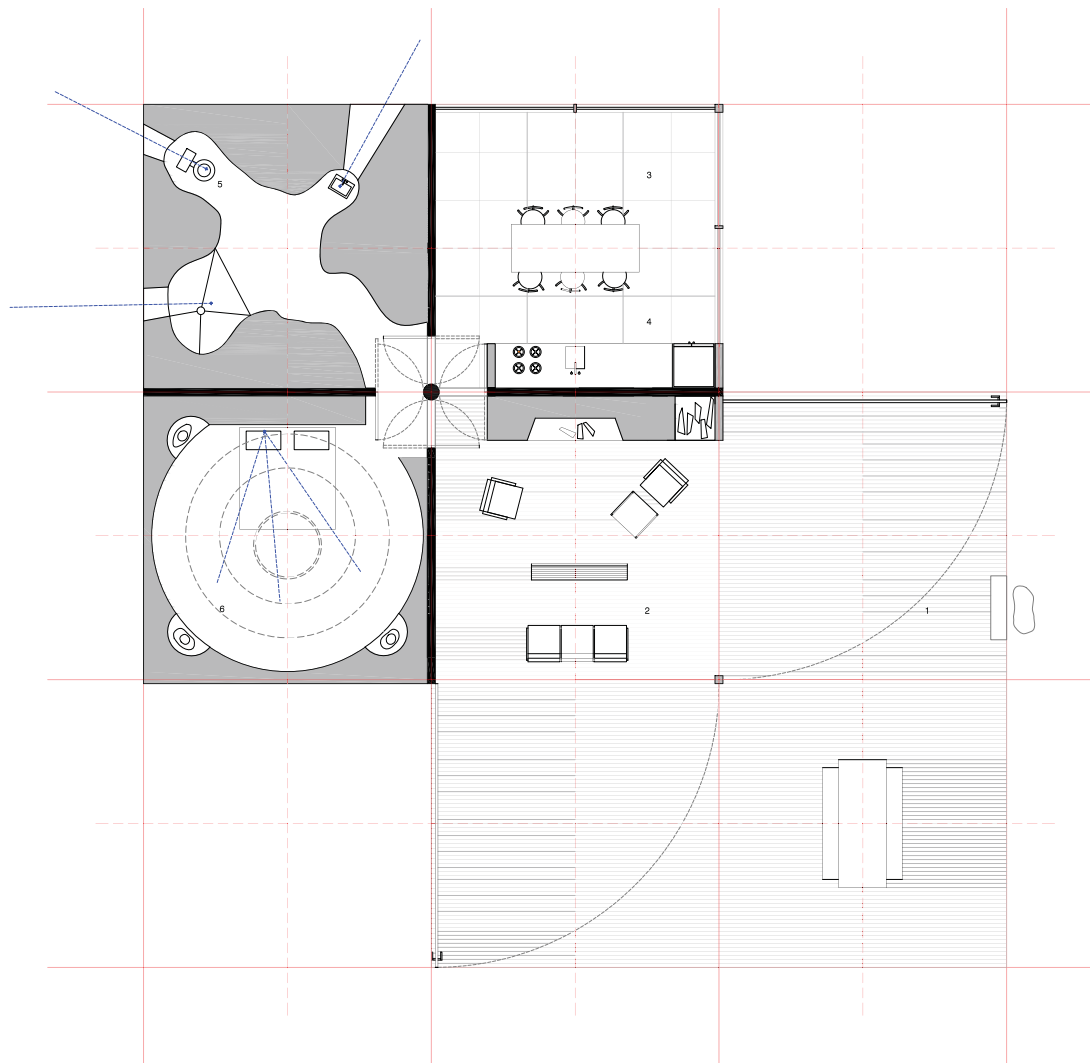
LINE



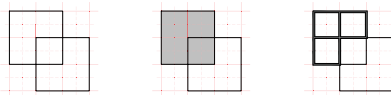
MASS



WALL

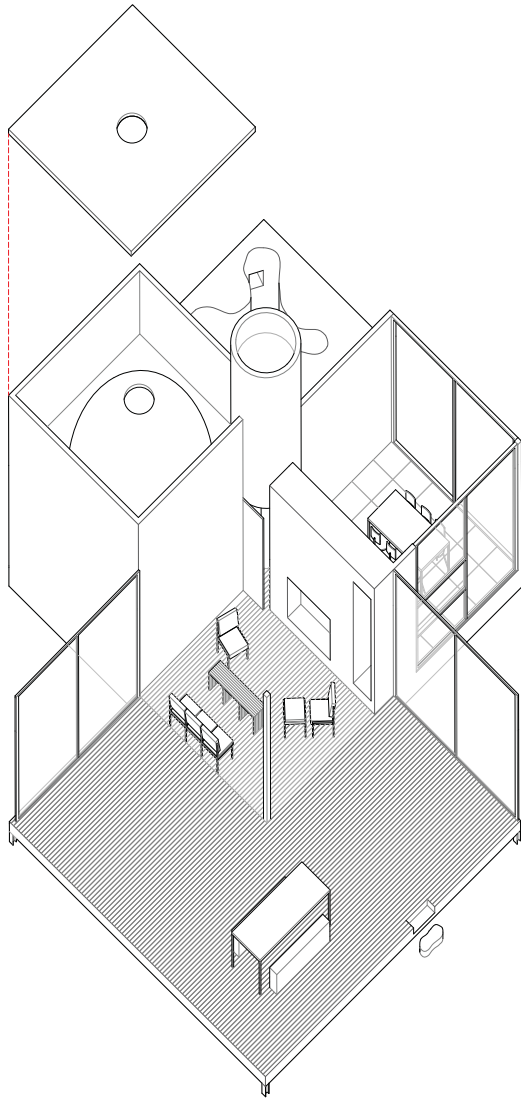


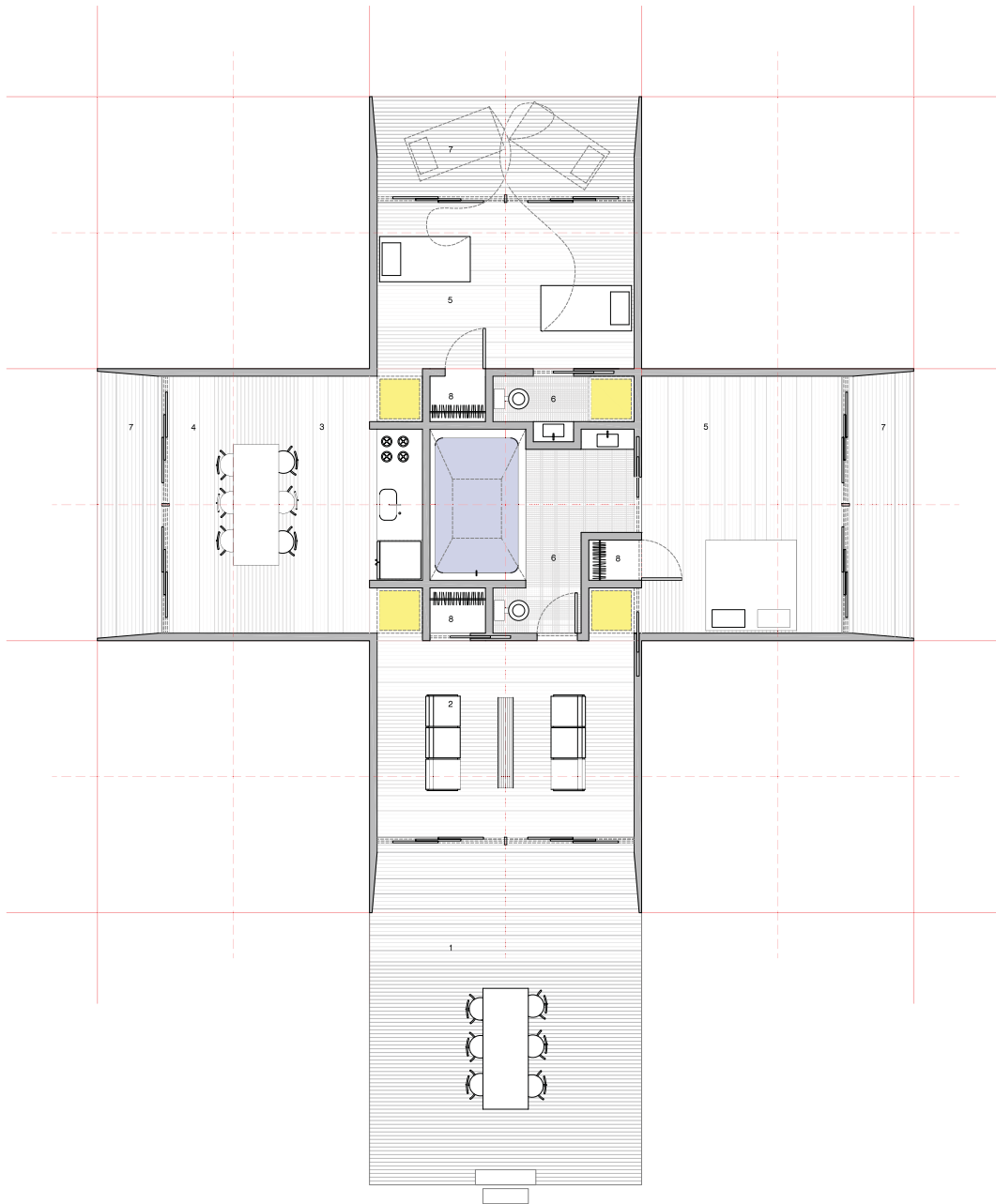
- 1 Deck
- 2 Live
- 3 Dine
- 4 Kitchen
- 5 Bathe
- 6 Sleep



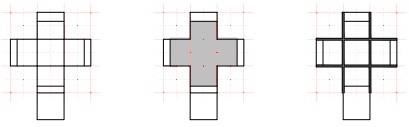
[1] 4 inset in 4 palimpsest over 4

The nine square is filled with interior for the upper left four bays with an open deck for the lower right three bays. The four enclosed bays are navigated by a central rotating doorway. Like a flip image, the body can spiral between worlds. Each square becomes a figural and material logic. Moving clockwise they are: full poche with organic carving for bathing; open transparency with service loaded edge bracket for cooking and dining; an open free plan with operable transparent pivot edges opening the living room to the deck; and a sculpted dome with open oculus for sleeping.



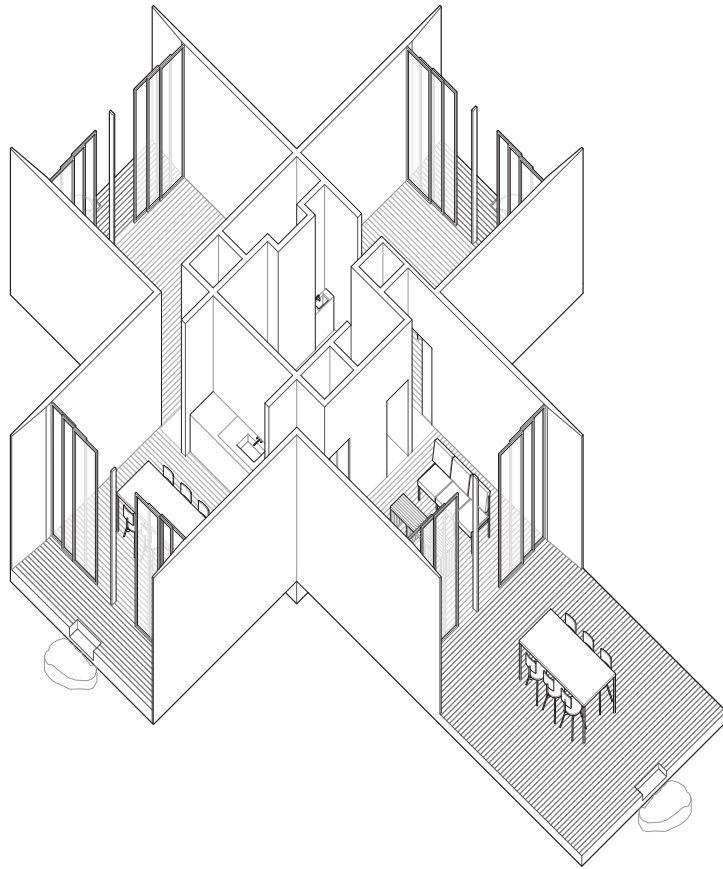


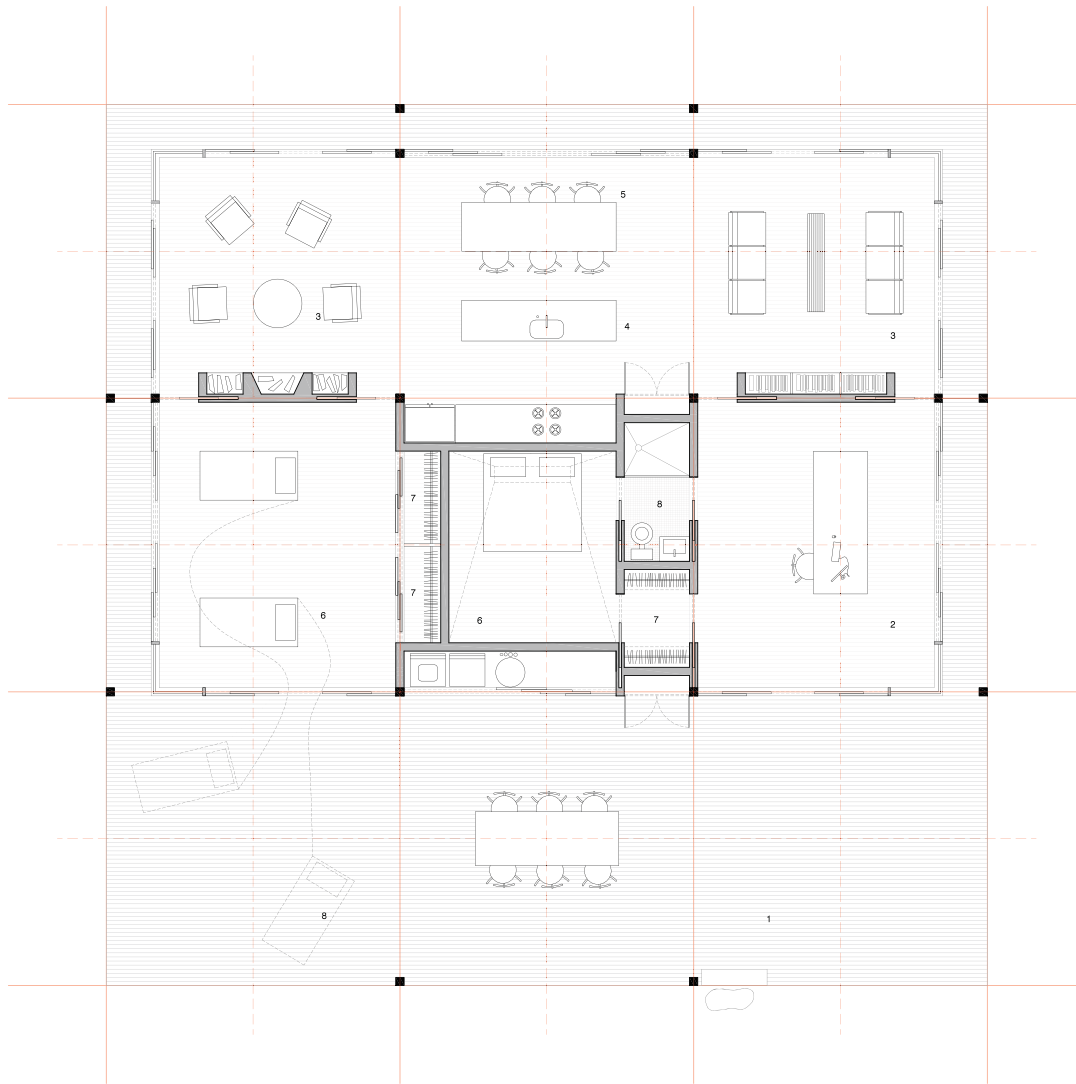
- 1 Deck
- 2 Live
- 3 Kitchen
- 4 Dine
- 5 Sleep
- 6 Bath
- 7 Sleep Porch
- 8 Store



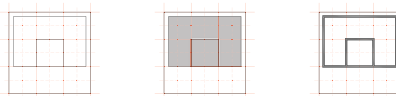
[2] cruciform

The cruciform plants the central module of the 9 square housing the core functions of the house. The form and spaces individually radiate outwards in the cardinal directions, levitating and celebrating the specific programs of live, dine, sleep, and sleep. Each space extends into a covered porch with tapering edges creating a frame to the surrounding landscape. The corners of the central core become the skylit passageways that bridge from room to room. A large tub beneath a limpet skylight anchors the central core.



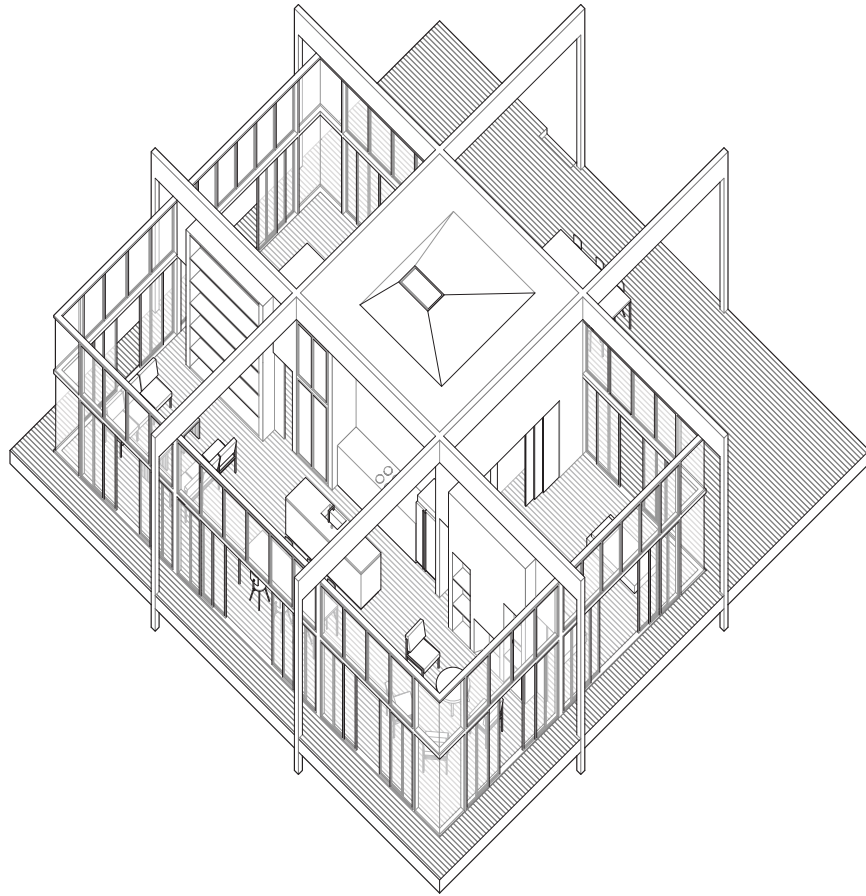


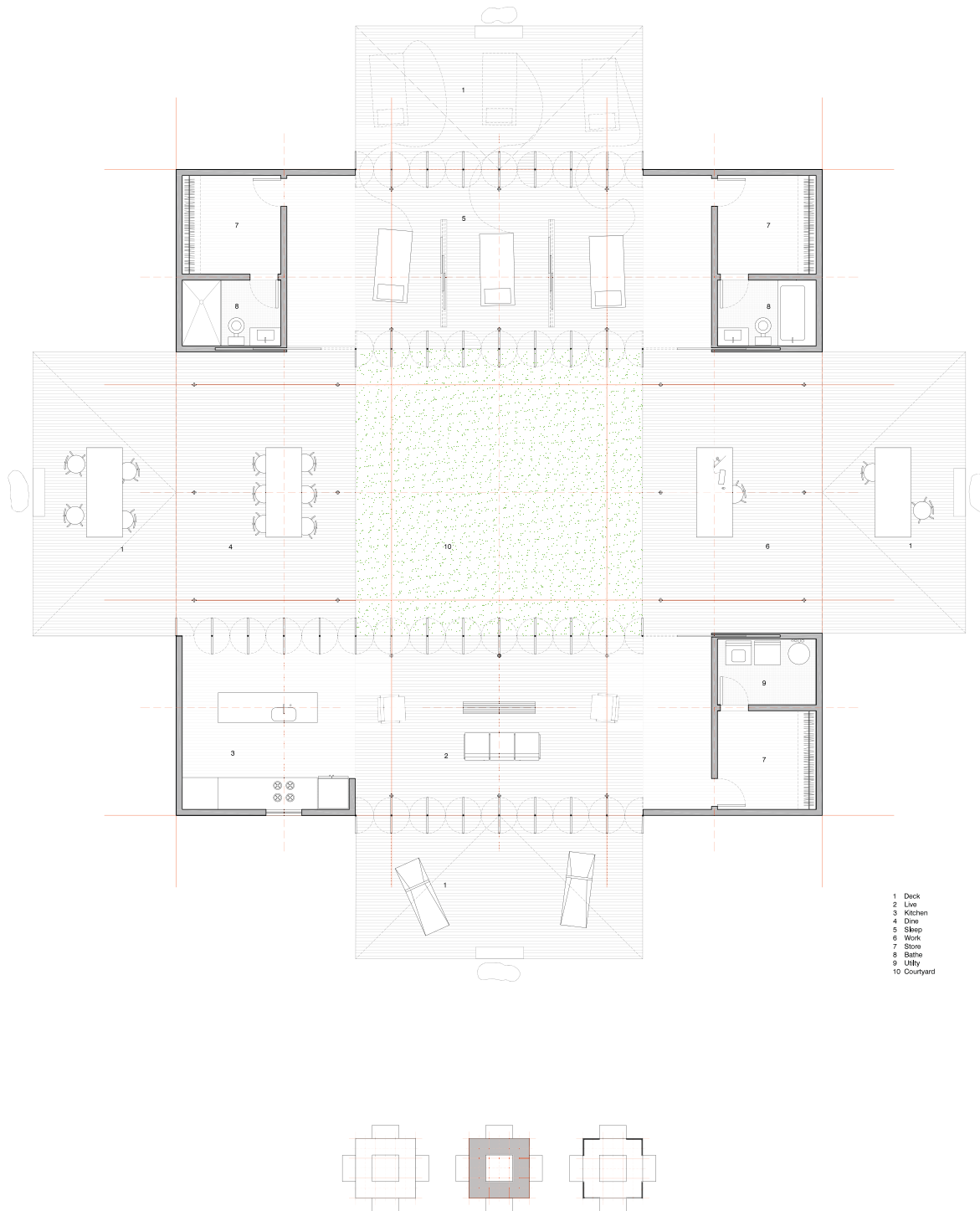
- 1 Porch
- 2 Work
- 3 Live
- 4 Kitchen
- 5 Dine
- 6 Sleep
- 7 Store
- 8 Bathe



[3] offset figure – two-thirds with porch

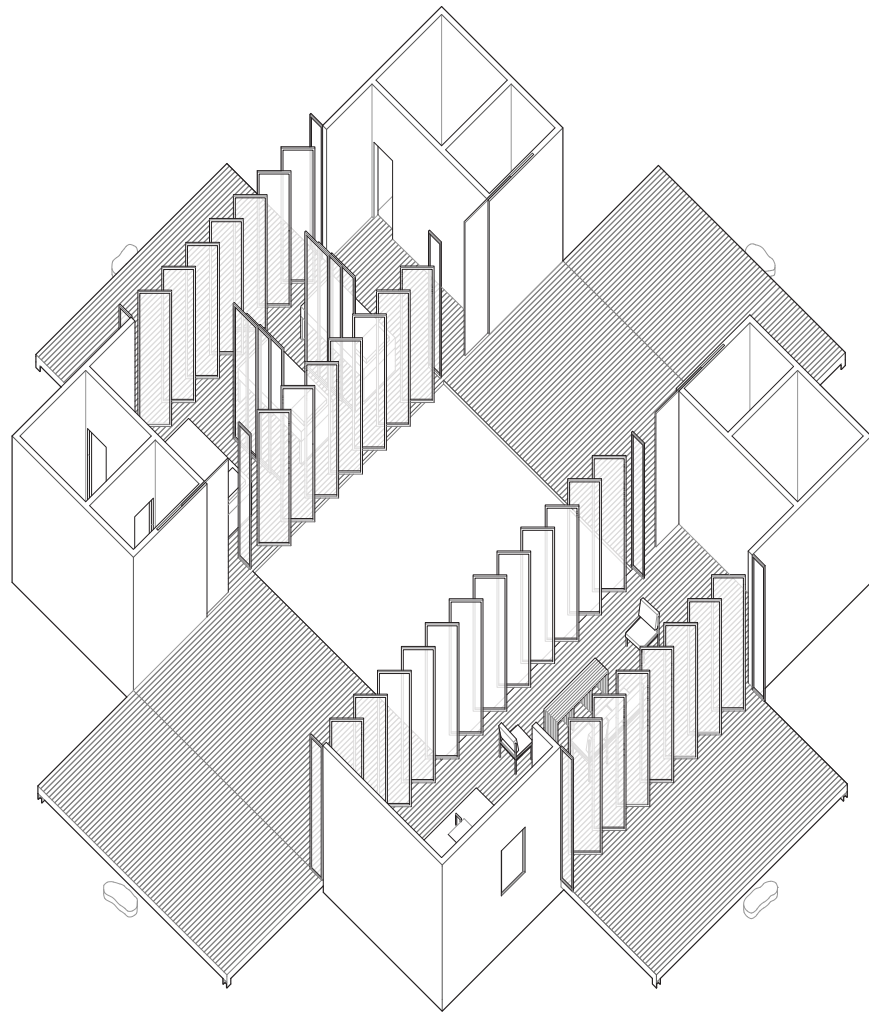
An offset bay held by the extending roof allows for a large covered exterior porch to balance the enclosed figure. An encircling ambulatory deck provides an offset buffer. The anterior bar layers living, dining and library. The center is an opaque service core with an inner winter sleeping room. This core is flanked by work space and summer sleeping that both open to the extended porch as an overflow.

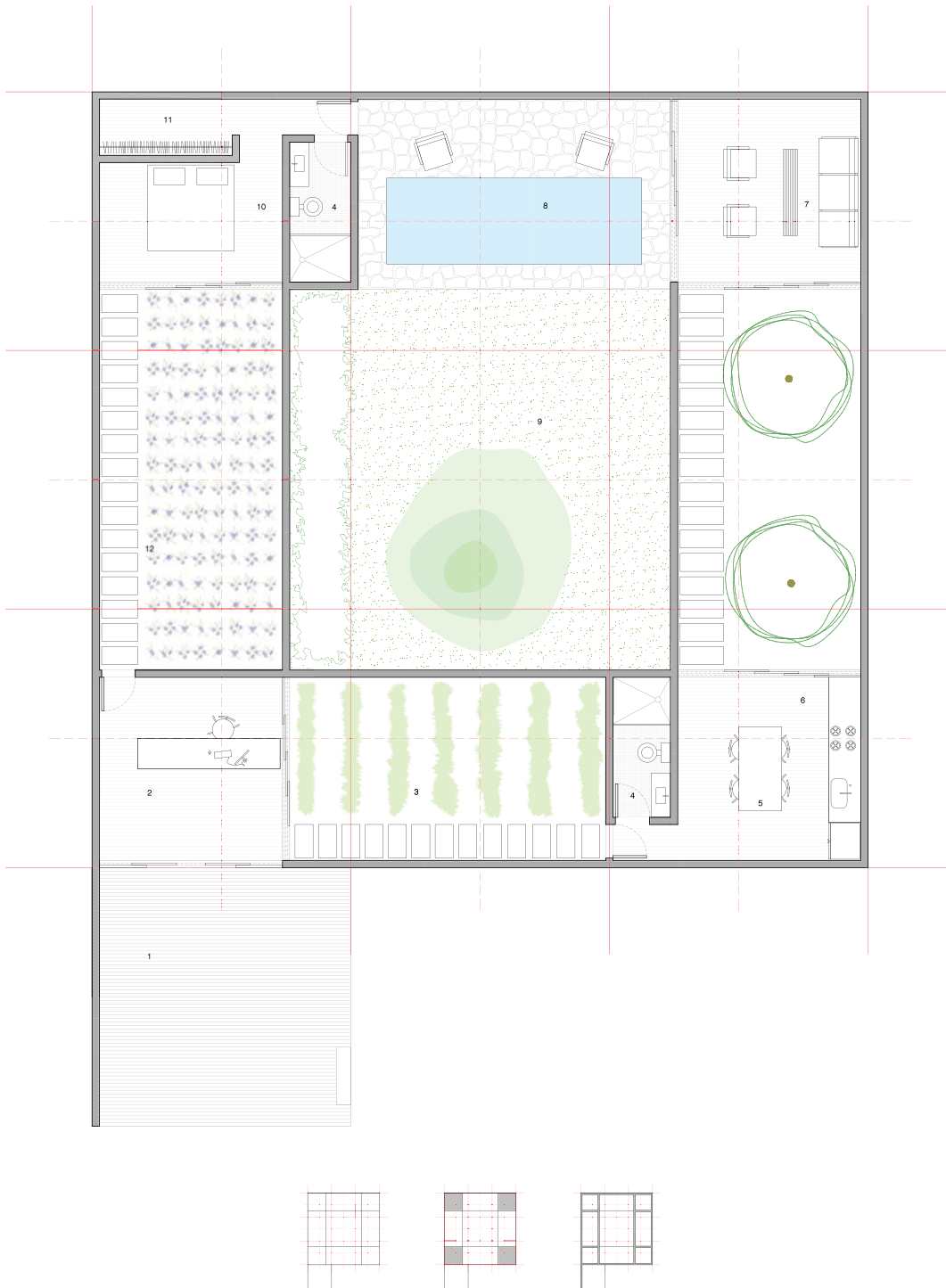




[4] courtyard

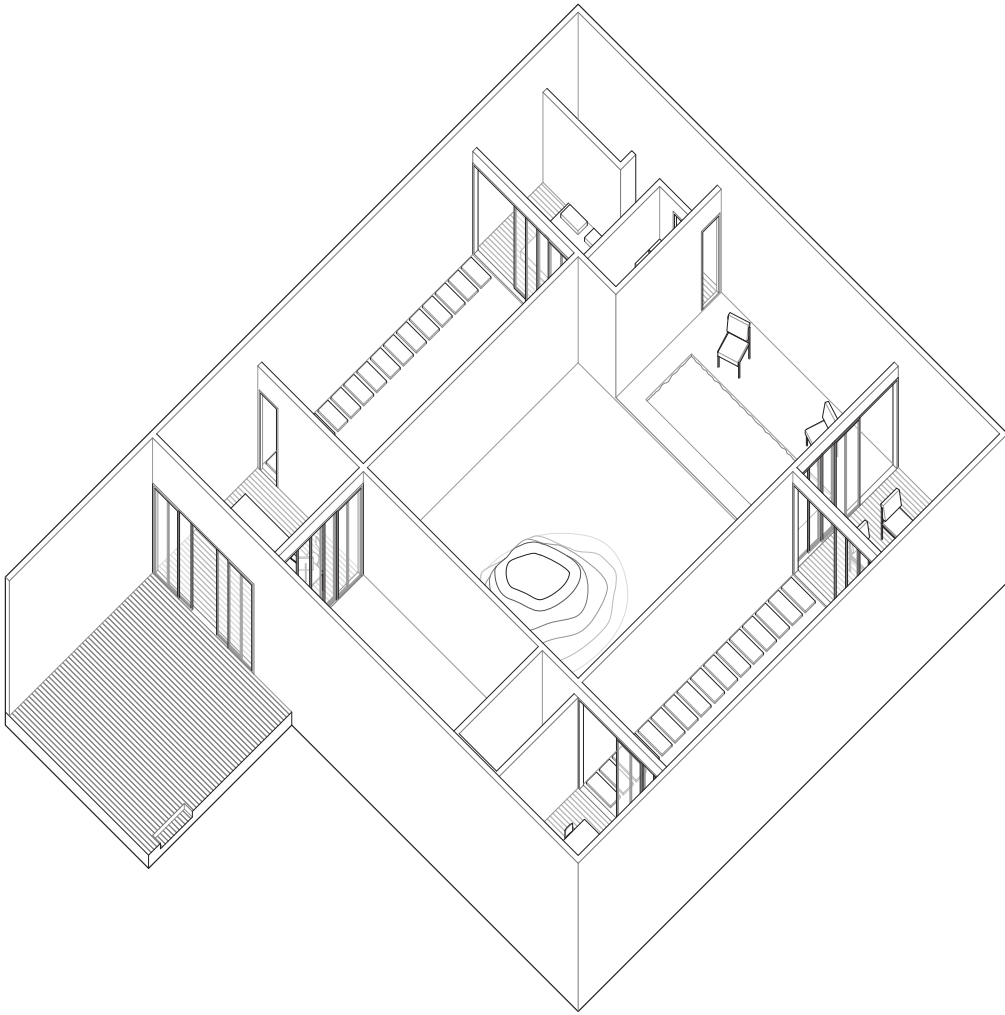
A square within a square leaves an encircling figure. An exterior void crosses the form laterally leaving dog trot covered porches. A transparent and operable corridor traverses in the opposing direction. The four corners become enclosed service cores of cook, store, bath and utility. Covering walls fold down as encircling decks. The donut figure is cross grained with a cruciform void.

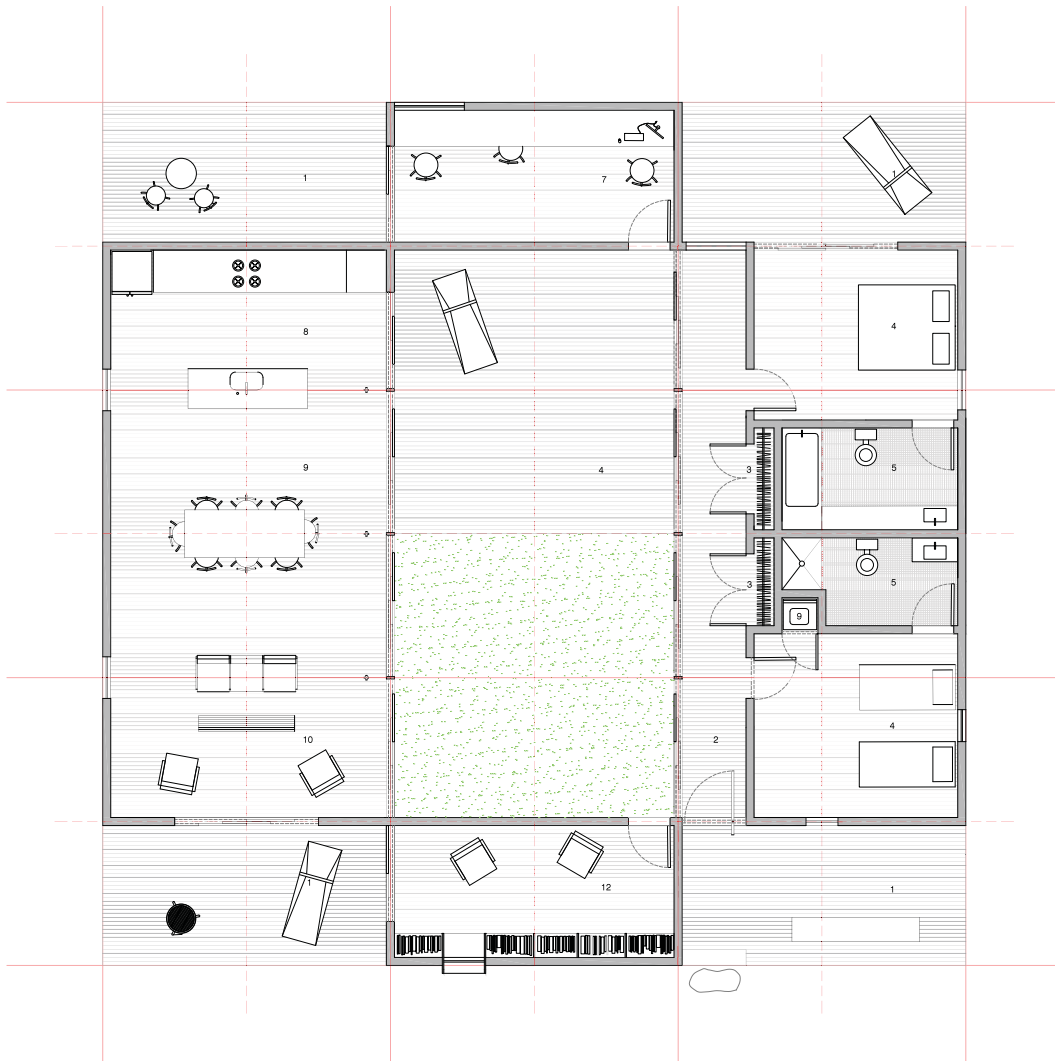




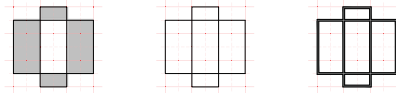
[5] offset with corner figure infill

Four corner rooms of: work, dine, live and sleep are linked by bar courtyards and encircle a central court. High pin wheeling walls direct the movement and segment the spaces. Chambered interiors and exteriors each take on different functional and vegetation characteristics. Each is experienced in defined isolation but links to an adjacent condition. An extending porch establishes an entry.



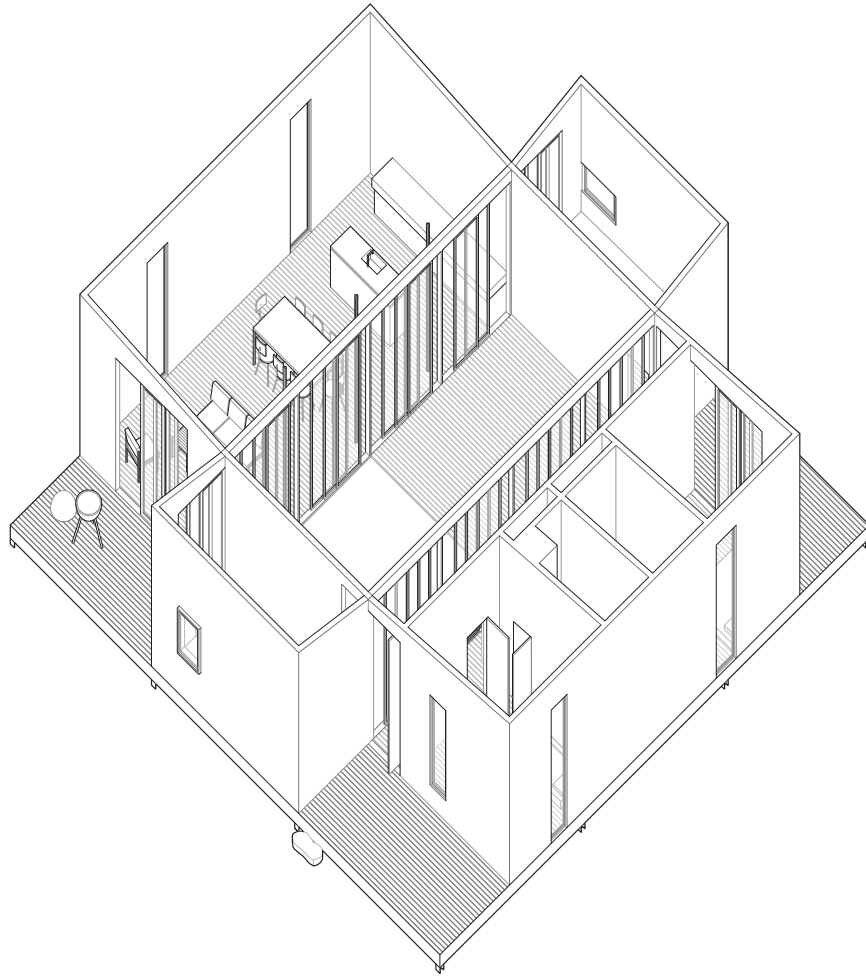


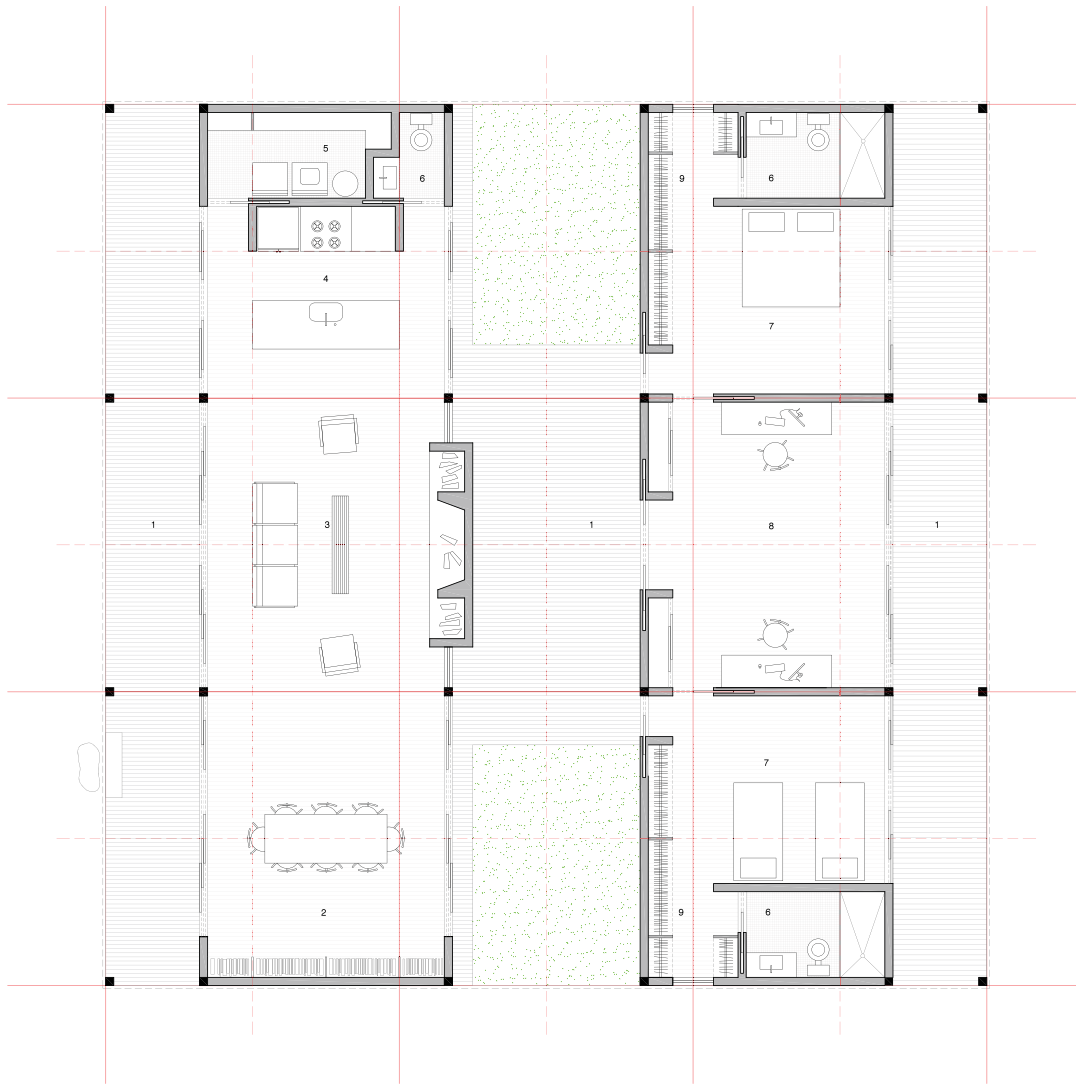
- 1 Deck
- 2 Entry
- 3 Store
- 4 Sleep
- 5 Bathe
- 6 Washer/Dryer
- 7 Work
- 8 Kitchen
- 9 Dine
- 10 Live
- 11 Library



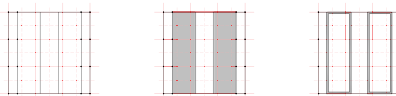
[6] four figured courtyard

Four elemental figures gather around the central void. Each zoned a different function" library, live, work and sleep; their individual characteristics respond to internal functions. The four corners become associated porches connecting the interior and exterior spaces. The central courtyard is half hardscape half softscape. A glass inner operable lining foils the selectively punched exterior.



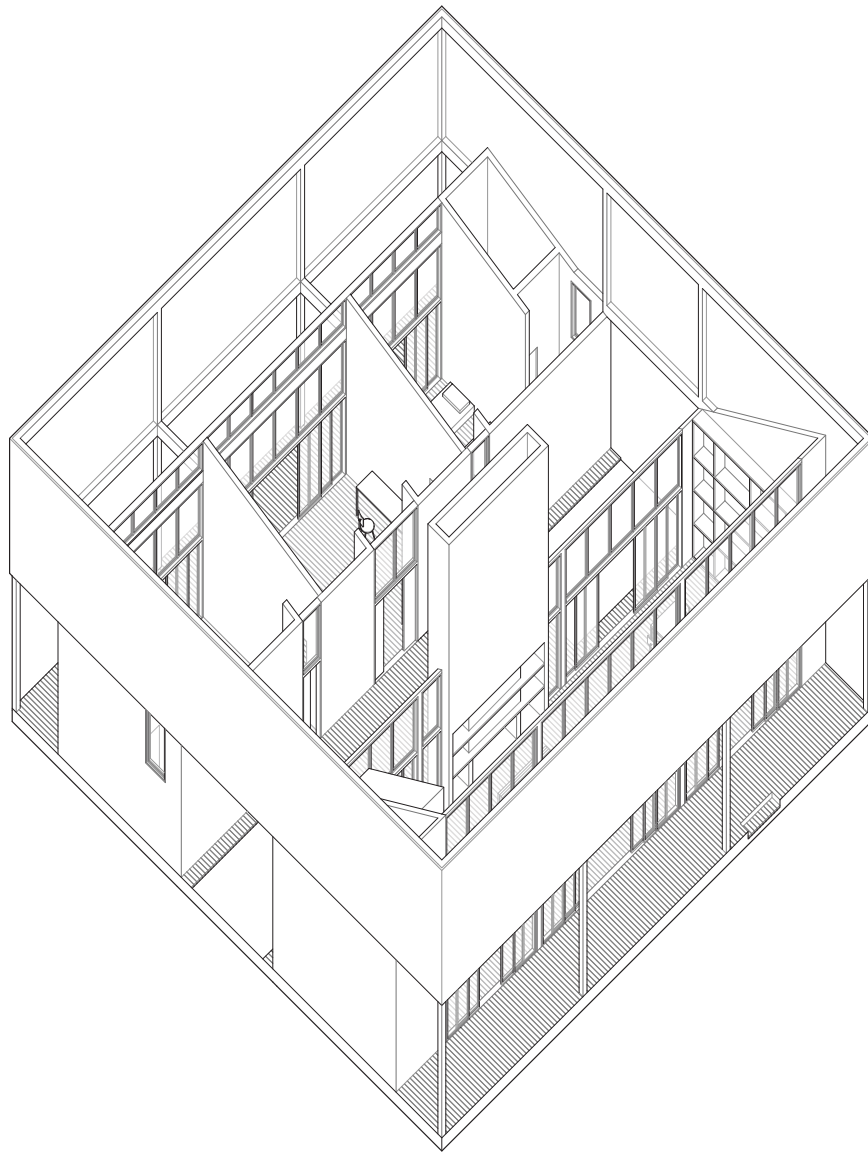


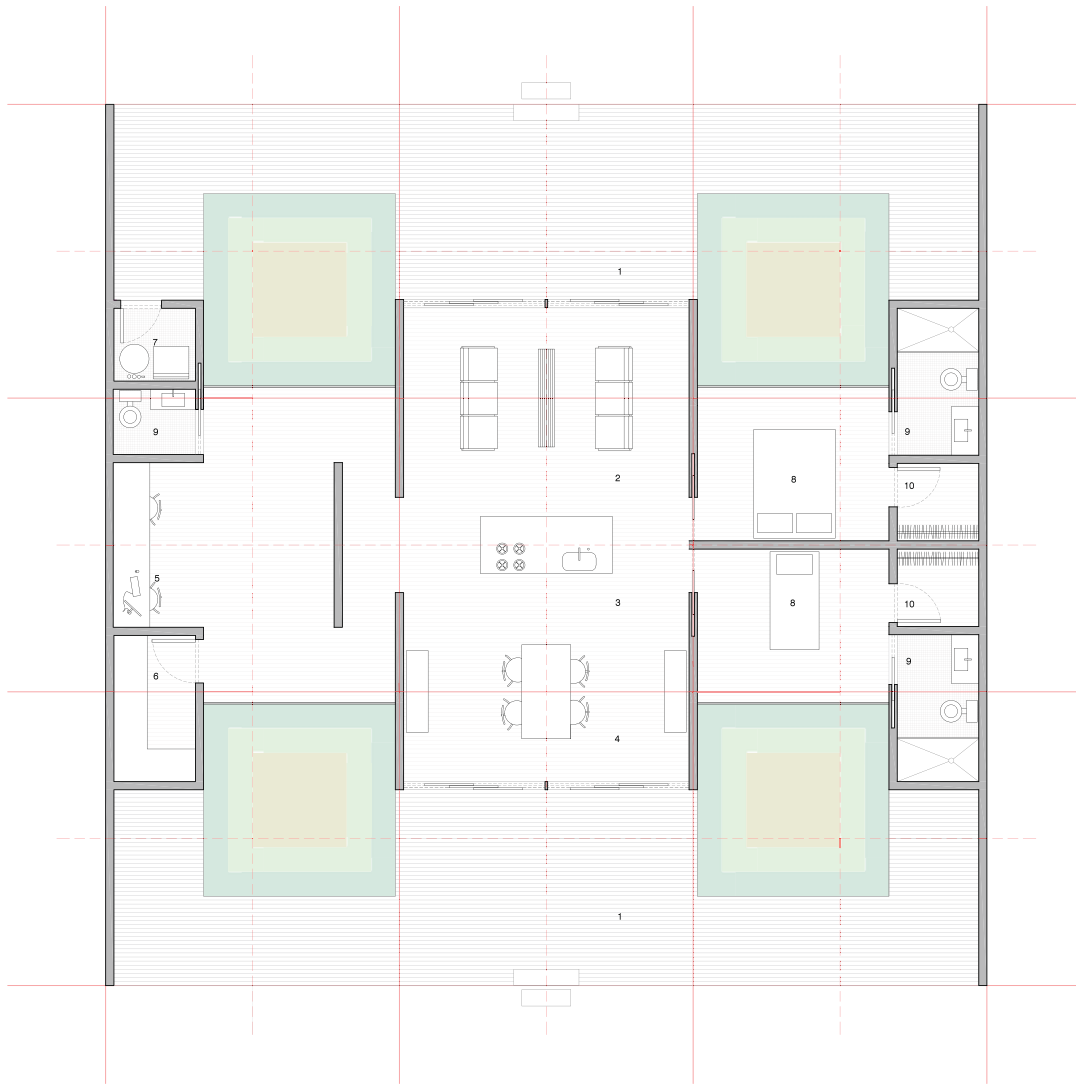
- 1 Deck
- 2 Dine
- 3 Live
- 4 Kitchen
- 5 Laundry
- 6 Bathe
- 7 Sleep
- 8 Work
- 9 Store



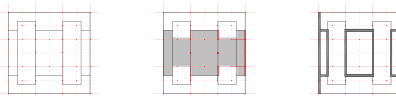
[7] banded mass with central courtyard

Two flanking volumes (one live and one sleep with work) flank a central linear courtyard. Two edging decks flank the operable edges of the programmatic bars opening to the larger site landscape. End cores house bathing facilities, service core and library storage. The inner courtyard is lined with storage wall and fireplace core. The two volumes have tilted butterfly roofs connected by a doubling opaque band.



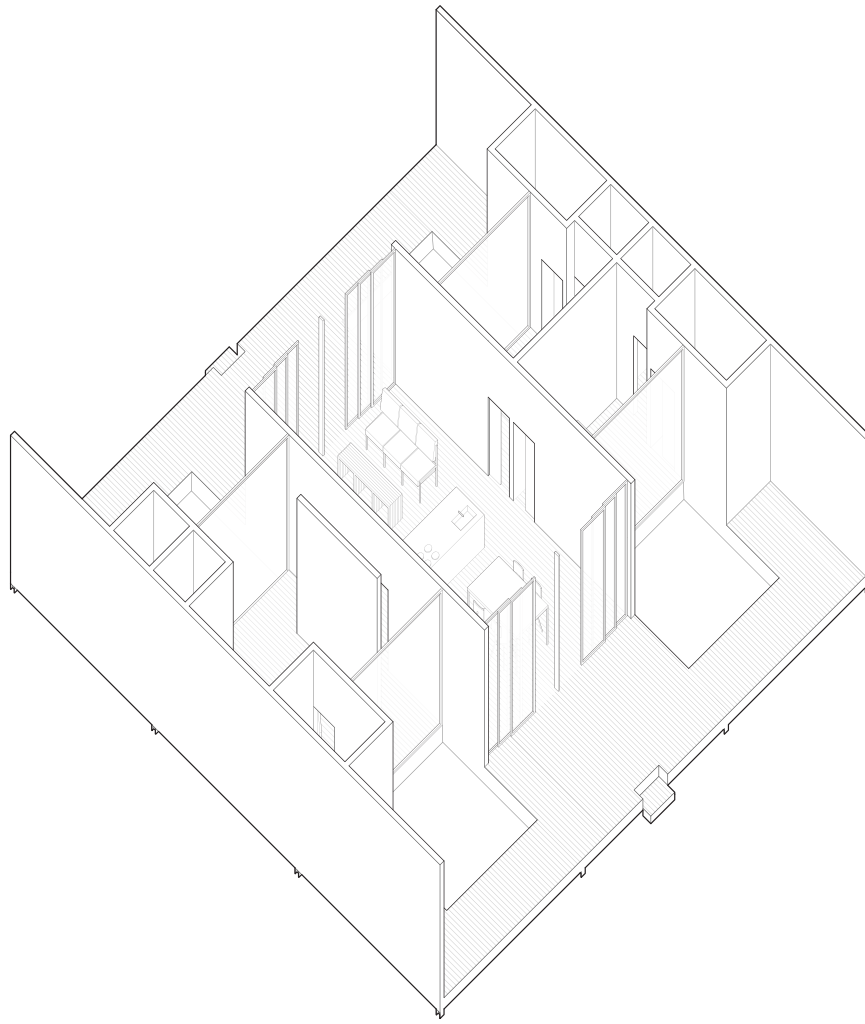


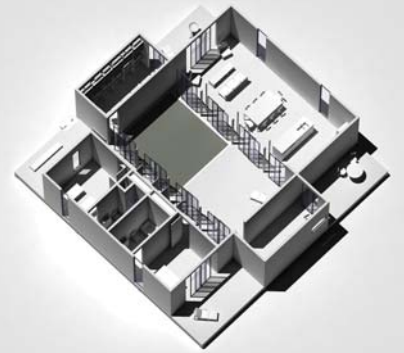
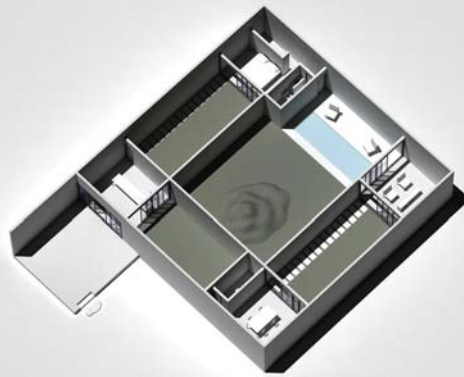
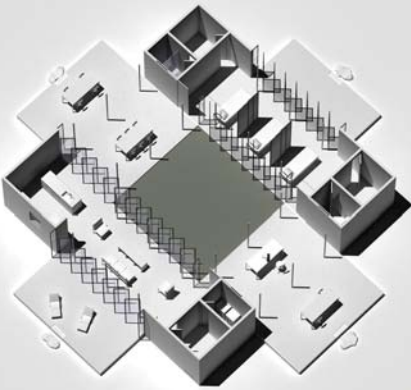
- 1 Deck
- 2 Live
- 3 Kitchen
- 4 Dine
- 5 Work
- 6 Utility
- 7 Maintenance
- 8 Sleep
- 9 Bathe
- 10 Store



[8] inset courtyards with end porches

Four inset courtyards anchor the two edging porches. A central live space is flanked by a work zone and a sleep zone further flanked by edging service cores. The collective is laterally transparent and longitudinally opaque.





The collective systems present a purposefully reductive formalism. Through the reduction of parts and details, the essential organization logics of the module and system allow for the experiential quality of each composition to be heightened. As prismatic lenses; minimal and essential, the systemic products allow for the individual and the iterative collection to engage a rationalized compositional logic.